

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Interview Summary

Mr. Pete Long was contacted on 23 October 2009 to obtain authorization for the examiners amendment. Mr. Long indicated that he would discuss the proposed amendment with the applicant. On 27 October 2009, Mr. Long authorized the examiners amendment.

The application has been amended as follows:

In claim 20, delete the term "all" in line 2.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in France on 14 June 2001. It is noted, however, that applicant has not filed a certified copy of the French application as required by 35 U.S.C. 119(b).

Reasons for allowance

The following is an examiner's statement of reasons for allowance: The claims are directed to an algorithm for identifying motifs or combinations of motifs at positions

of hyper-variability in sequences of a collection of aligned sequences. Three matrices of binary values are formed to identify the positions of hyper-variability in sequences. A first matrix indicating the positions in each of the sequences of the collection that are mutated relative to a reference sequence is formed. A second matrix indicating correlated motifs that are not mutated relative to the reference is formed from the first matrix. A third matrix indicating the correlated motifs that are mutated relative to the reference is formed from the first matrix. The matrices are compared to identify positions of hyper-variability. The art does not fairly show a method of forming the three binary matrices and their comparison to identify positions of hyper-variability as instantly claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARLHEINZ R. SKOWRONEK whose telephone number is (571)272-9047. The examiner can normally be reached on 8:00am-5:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjorie Moran can be reached on (571) 272-0720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KARLHEINZ R SKOWRONEK/
Examiner, Art Unit 1631

17 November 2009